

Manufacturing Controlled Environmental Equipment Since 1908



CORPORATION

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HOTPACK CORPORATION



**FIRST IN ENVIRONMENTAL
EQUIPMENT**

**Ovens
WALK-IN ROOMS
WATER BATHS
FURNACES
INCUBATORS
STERILIZERS
TEMPERATURE TEST
CHAMBERS**

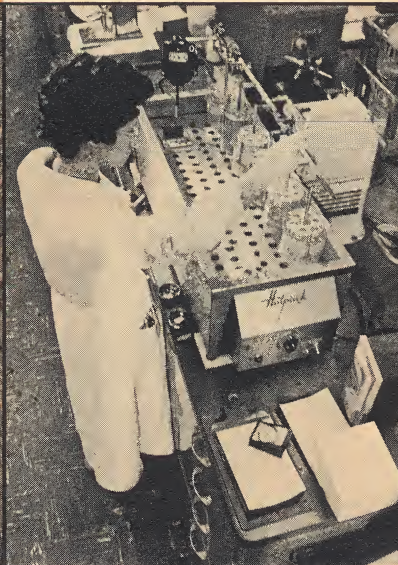
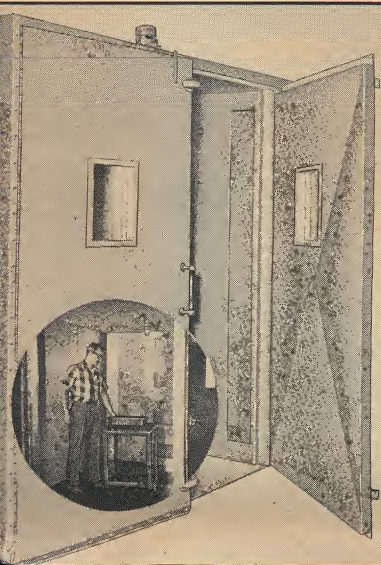
REPRESENTED BY:
McFARLAND & CONCHAR
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PRODUCTION

LABORATORY

QUALITY CONTROL

PILOT PLANT



OVENS

FORCED DRAFT OVENS

Hotpack's forced draft ovens fit a multitude of laboratory drying and aging requirements. Scientific forced air system insures uniform temperatures throughout the chamber!

Temperatures are controlled from above ambient to 280°C within 0.5°C by a precise, easily adjustable thermostat. A wattage selector provides control heat input. All controls are centered in a recessed, protected panel.

- Accurate temperature control thermostat
- Stainless steel interior
- Safe, low wattage heating elements
- Wattage selector switch
- Forced air circulation
- Recessed, protected control panel

MECHANICALLY CONVECTED OVENS

For heating with *maximum temperature uniformity*, choose from dozens of standard Hotpack mechanically convected ovens. Each oven has a built-in, scientific air circulation system.

Temperature control systems includes an *automatic*, over-temperature safety device. Controlled temperature available. 200° to 538°C. Stainless Steel chambers are insulated with pre-compressed, glass wool.

- Maximum heat transfer by air circulating system, air intake, velocity, exhaust
- Interior stainless steel chamber, shelving
- Chamber capacities up to 31 cubic feet
- Efficient, glass wool insulation
- Automatic, over-temperature Limitstat
- Accurate, adjustable thermostat control
- Protected, recessed control panel

VACUUM OVENS

Hotpack's new, exclusive "square" chamber design gives more vacuum heat treating load space. Chamber temperatures to 200° or 300°C and vacuum capable to one micron according to pump size.

Controls include adjustable thermostat and wattage selector switch. Door, with full view window, has silicone gasket for tight, positive seal.

- Temperature ranges to 200° and 300°C
- Steel or stainless steel chamber and shelving
- Optional console model for pumping system
- Adaptable for dry box attachment
- Efficient door gasketing, glass wool insulation, heavy gauge steel exterior
- Micro-adjustment bleed, backfill valves
- Protected, recessed control panel

SAFETY OVENS

For heat treating of volatile products, Hotpack safety ovens eliminate virtually all dangers. Fumes are purged by a scientific air circulation system. All electrical connections are made *outside* the chamber. Heating elements maintain low surface temperature. Rear blow-out panel releases automatically in steel cage should chamber pressure exceed safe limit. Over-temperature Limitstat control is included.

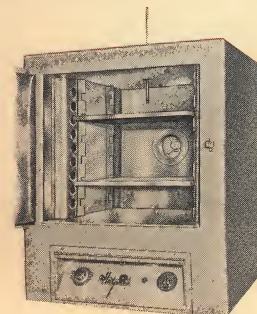
- Chamber capacities to 31 cubic feet
- Stainless steel chamber and shelving
- Efficient glass wool insulation, and door gasketing
- Electrical connections made outside chamber, low surface temp heating elements, rear blow-out panel and cage, Limitstat
- Temperature ranges to 200°, 280°, 300°, 350°C

INDUSTRIAL OVENS

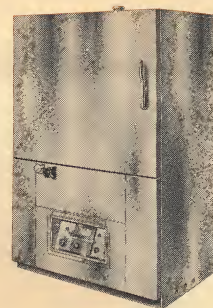
Rugged Hotpack industrial ovens are available with two types of mechanical air circulation: *horizontal* or *vertical*. Ovens give extremely uniform temperatures up to 600°F.

Indicating-controlling thermostat makes temperature selection fast and sure. Ovens are constructed in heavy gauge steel, for "low" or "high" loading. Batch and truck ovens are optional.

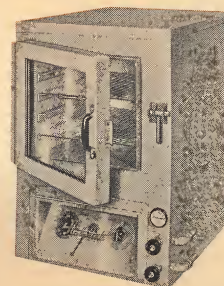
- Heavy duty, rugged ovens give up to 600°F
- Chamber capacities up to 50 cubic feet
- Motor-driven blower, scientific air circulation system has adjustable intake, vent
- Adjustable indicating-controlling thermostat, over-temp Limitstat, safety switch
- Dual door gasketing, pressure sensitive door latches, adjustable shelving
- Four inches of glass wool insulation



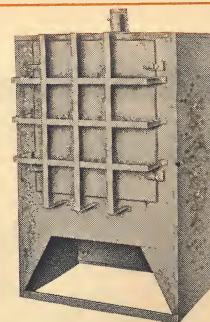
MODEL 1302



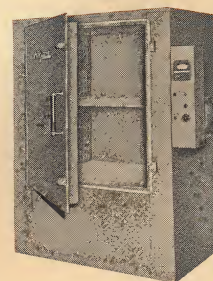
MODEL 1293



MODEL 633



REAR VIEW



MODEL 1412

WALK-IN ROOMS

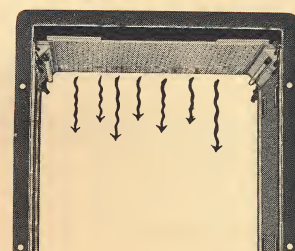
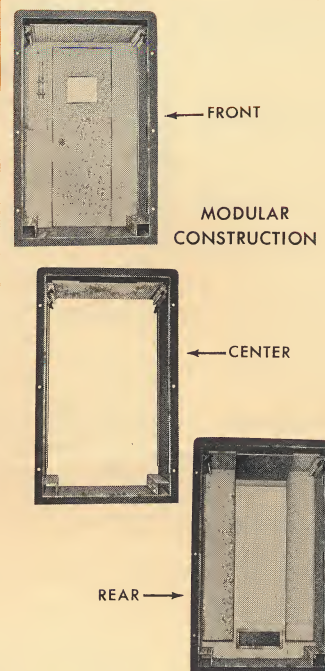
Hotpack is the originator of *portable, controlled environmental walk-in rooms*. Each room is constructed in all-aluminum, modular units. Modular design permits simple, fast installation and future expansion or relocation. And most important, each room is prefabricated, prewired and pretested before delivery!

Hotpack rooms are designed with complete instrumentation to meet the variety of controlled environmental conditions listed below. **A COMPLETE PLANNING SERVICE FOR ARCHITECT AND OWNER WHICH INCLUDES DESIGN, CONSTRUCTION, OPERATION, INSTALLATION AND MAINTENANCE IS OFFERED.**

- Heated Rooms, above Ambient to 60°C (125°C optional)
- Refrigerated Rooms, below Ambient to 0°C (or lower)
- Heated-Refrigerated Rooms, 0° to 60°C
- Humidification, 5% to 98% RH (optional)

WHERE WALK-IN ROOMS ARE USED

Because of low-cost, modern construction and highly reliable temperature uniformity, Hotpack walk-in rooms are used where one room can eliminate a number of smaller cabinets. Typical uses include incubation of all types, B.O.D. determinations, preservation of vaccines, storage and aging of foods and pharmaceuticals, animal and plant growth, storage of metal and electronic components, to mention a few.



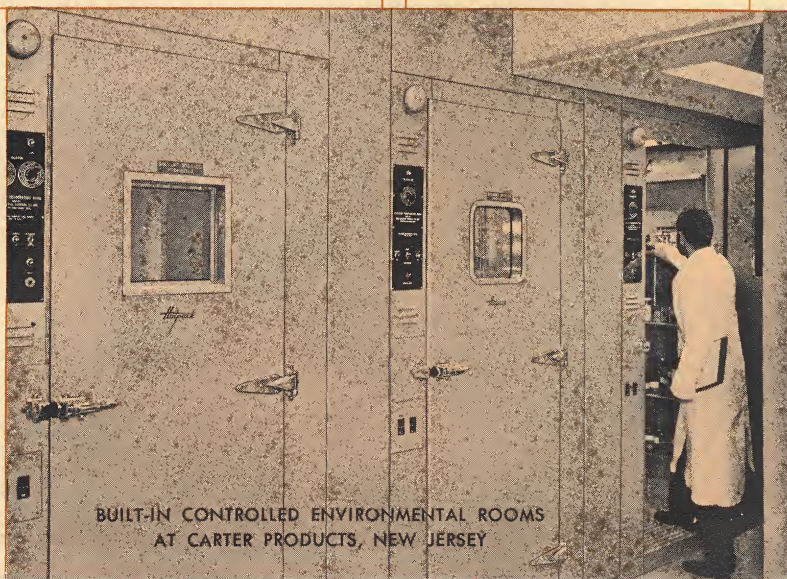
UNI-FLOW AIR CIRCULATION



ADJUSTABLE SHELVING



STANDARD WALK-IN MODIFIED WITH WORKBENCH



BUILT-IN CONTROLLED ENVIRONMENTAL ROOMS
AT CARTER PRODUCTS, NEW JERSEY



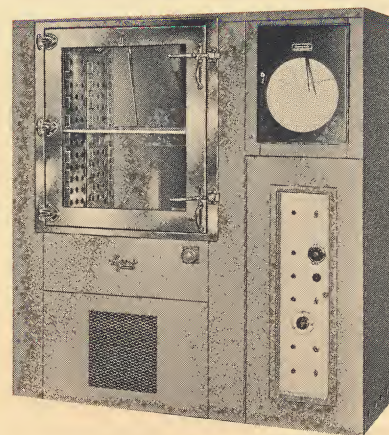
CONTROLLED
ENVIRONMENTAL
EQUIPMENT

TEMP-HUMIDITY TEST CHAMBERS

Hotpack's Temp-Humidity chambers allow you to duplicate many environments for pilot plant, laboratory and quality assurance tests . . . with precise control at all times! Temperature ranges are offered from -10° to 99°C (or from 35°C) and humidity from 20% to 98%. Temperature and humidity are controlled by a recording-controlling instrument and humidity input controller.

Uniform air circulation throughout the chamber is provided by a high velocity, motor driven blower. A built-in, hermetically sealed, air cooled compressor and evaporating coils give rapid, controlled thermal drops to -10°C .

- Controlled -10° to 99°C and 20% to 98% relative humidity
- All controls are housed in a central, recessed panel
- Proportioning humidity input control
- Chamber capacities up to 30 cubic feet, welded throughout
- Two pen, recording-controlling instrument; *automatic*, over-temperature safety Limitstat and humidity control
- Meets MilSpec 202B, steps 1 to 6 (optional)
- Full gasketing for positive door seal; full door window and water filter



MODEL 1246-L

designed to meet JAN-MIL specs.

HI-LOW TEST CHAMBERS

Hotpack temperature test chambers give rapid, dependable liquid carbon dioxide refrigeration to -100°F . A high velocity, motor driven blower circulates the air uniformly, preventing "snow" formations. A double bank of heating elements allow fast come-up to 400°F .

Temperature control is made by an adjustable indicating-controlling thermostat. And for added safety to your workload, each chamber is equipped with an *automatic* Limitstat. Rugged interior construction is polished stainless steel, surrounded by four inches of glass wool insulation.

- Precisely controlled temperature from -100° to 400°F
- Portable, bench, floor models up to 18 cu. ft. capacity
- Portable test chambers designed to fit standard test racks
- Indicating-controlling thermostat and *safety* Limitstat
- Polished stainless steel interiors, enameled steel exteriors
- Special door gasketing, chrome hardware, glass wool insulation, high velocity-motor driven blower, gas fittings

HI-LOW OVENS

Hotpack's Hi-Low (mechanical refrigeration) Ovens offer dependable temperature testing from 0° to 180°C . Uniform air circulation within chamber is provided by high velocity, motor driven blower. Interiors are constructed of durable stainless steel and surrounded by pre-compressed glass wool insulation.

Air circulation system includes air intake, velocity and exhaust controls. Chamber capacities available up to 30 cu. ft.

Temperature selection and control is easy and fast. An adjustable thermostat is accurate within plus/minus $\frac{1}{2}^{\circ}\text{C}$. To insure safe operation, an over-temperature safety Limitstat *automatically* prevents excessive temperatures.

- Precise temperature control, 0° to 180°C
- *Automatic, safety* over-temperature Limitstat
- Stainless steel interior, shelving; heavy gauge steel exterior finished in baked-on enamel
- Reliable mechanical refrigeration system with *automatic* "pump down" of Freon
- Efficient mechanical air circulation for top temperature uniformity
- Optional program controllers for automatic temp control



MODEL 1503



MODEL 1206W

INCUBATORS

CARBON DIOXIDE INCUBATORS

For reliable culture growth at elevated carbon dioxide tension, the new Hotpack CO₂ incubator is an economical investment. CO₂ tension is controlled at any point between 0 to 20%, temperature from ambient to 60°C and humidity well above ambient.

- Precise compressed air and CO₂ flow meters, pressure valves
- Visible mixing bubbler
- Accurate temperature thermostat and automatic over-temperature Limitstat
- New Auto CO₂NTROL for automatic tension recovery
- Stainless steel chamber, shelving and double doors (and window)

LARGE CAPACITY, REFRIGERATED INCUBATORS

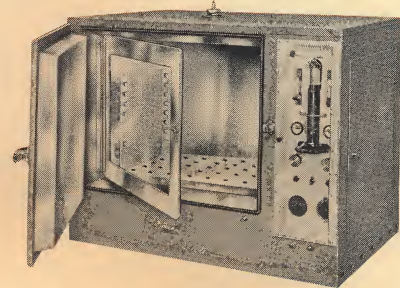
Hotpack's mechanically convected, large capacity incubators offer controlled temperatures 0° to 60°C, humidity above ambient to 98% and CO₂ tension 0% to 20%. A mechanical convection system provides uniform air circulation throughout the 25 cubic foot chamber.

- Unique air circulation system for maximum temperature uniformity
- Stainless steel chamber 25 cu. ft. size
- Controls temperature 0° to 60°; humidity 20% to 98%; CO₂ tension 0% to 20%
- Adjustable temp controller; humidity controller; CO₂ flow meters, valves; automatic over-temperature protection
- Adjustable stainless steel shelving
- Full length, sealed door window

B.O.D. REFRIGERATED INCUBATORS

For general laboratory uses, including B.O.D. determinations, serum, heredity studies, Hotpack floor model and undercounter incubators are a low cost investment. Refrigerated-Heated models offer accurate temperature control, 5° to 50°C plus forced air circulation. The refrigeration system is sealed, pre-lubricated and guaranteed. Controls include a sensitive, adjustable thermostat.

- Refrigerated and/or Heated Incubators 5° to 50°C; 10 cubic feet models
- Easily adjustable thermostatic control
- Built-in air circulation system
- Controlled 5° to 50°C within 0.2°C
- Automatic hi and low safety thermostats



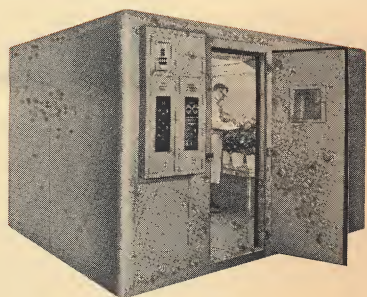
MODEL 508



MODEL 1232



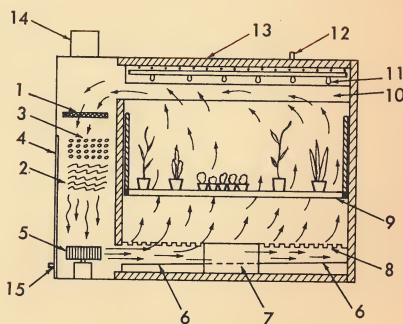
MODEL 525



WALK-IN GROWTH CHAMBERS/ROOMS

PLANT AND ANIMAL PATHO-PHYSIOLOGY • AGRONOMY • ENTOMOLOGY • GENETICS

Hotpack's Walk-in growth chambers and rooms have been designed to eliminate the need for numerous smaller, costlier cabinets. Modern module, all aluminum construction combines all the essentials for reliable artificial growth: precise control of light intensity — temperature — air velocity, and relative humidity — with roomy work space and economical operation. These growth facilities offer contemporary scientists versatile design which accurately and continuously reproduce a full range of critical growth environments. In addition, each model is completely self-contained . . . quickly assembled and installed, requiring minimum maintenance year after year. Because of this developed engineering know how, a variety of sizes and conditions are available now as standard units. Each model, too, is equipped for immediate use . . . or may be easily modified for your special purposes.



- | | |
|-----------------------------|---------------------------------------|
| 1. Fiberglass filter | 8. Slotted floor plate (false bottom) |
| 2. Bank of heating elements | 9. Adjustable bench |
| 3. Refrigeration system | 10. Ductwork |
| 4. Removable service grill | 11. Lamp plenum, Mylar panels |
| 5. Dual blowers | 12. Exhaust vent |
| 6. Water reservoir pan | 13. Insulation |
| 7. Walk-in area | 14. Lamp ballast |
| | 15. Water drain |



CONTROLLED
ENVIRONMENTAL
EQUIPMENT

WATER, OIL BATHS

ALL PURPOSE WATER BATHS

Hotpack's all purpose water baths are constructed of durable polished stainless steel with heli-arc welded seams. Standard baths are available with or without motor driven stirrers. Each bath is fully insulated for safe operation. Temperature controls include adjustable thermostat, wattage selector switch and pilot lights. Built-in refrigeration coils are optional.

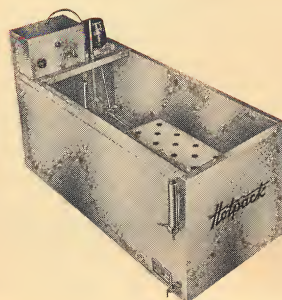
- Ambient to 125°C
- 0° to 60°C optional

HEAVY DUTY OIL BATHS TO 500°F.

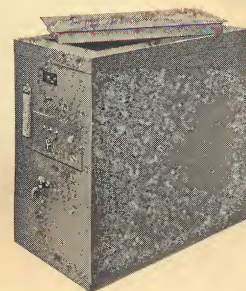
These high temperature baths have a multitude of uses in testing electronic components, drawing or tempering in oil, cleaning metal parts and asphalt coating and dipping. An adjustable thermostat controls temperature from 200° to 500°F.

The bath interior is non-corrosive stainless steel and is insulated with glass wool. All joints and seams are heli-arc welded. The heavy gauge steel exterior cabinet has a rust resistant, enameled finish. A drain valve is provided.

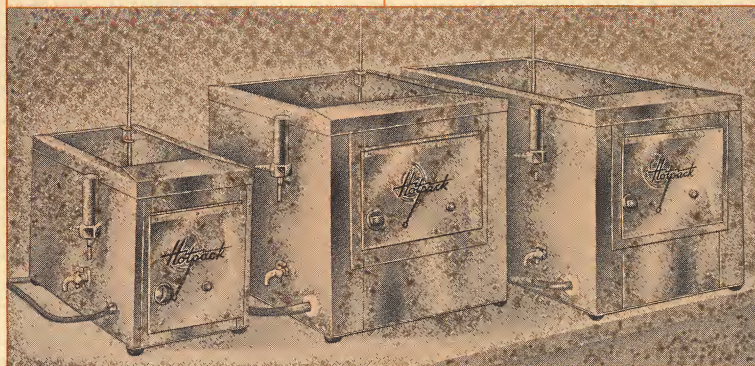
**SPECIAL SIZES, TEMPERATURE RANGES
QUOTED ON REQUEST**



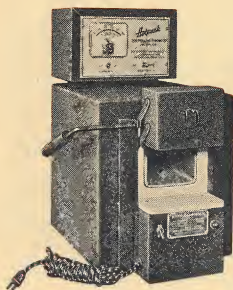
MODEL 324



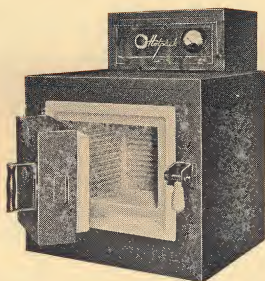
MODEL 3001



MODELS 411, 413, 415



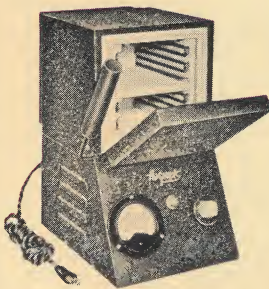
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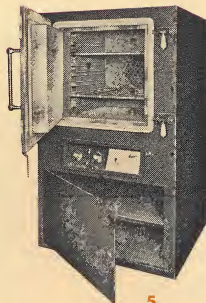
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3



4



5

ELECTRIC FURNACES

1. **MUFFLE FURNACES** that are designed to solve your most rigid heating problems at temperatures to 2000°F. Furnace has one piece, non-metallic muffle. Up-lift door protects operator. Available with manual or automatic controls.
2. **SUPER TEMP FURNACES** give controlled heat from 100° to 2350°F (1290°C). Seven inches of heavy duty insulation protects operators, minimizes heat loss. Choice of manual or automatic controls in a protected control panel.
3. **ALL PURPOSE FURNACES** give reliable heating from 100° to 1100°C (2012°F). Models are available with chamber capacities up to eight cubic feet. Each furnace is safely insulated with five inches of firebrick. Choose from manual, semi-automatic or automatic controls.
4. **SMALL LAB FURNACES** designed with new, lightweight *Tipersul* insulation. Furnace sizes are perfect for ashing, drying, fusions of metals and chemicals from 400° to 1900°F. Reaches top temperatures in minutes. Available with manual or automatic controls.
5. **AIR RECIRCULATING FURNACES** with fully automatic control from ambient to 1200°F (650°C). Motor driven blower circulates air uniformly in durable stainless steel chamber. Chamber sizes up to 16 cubic feet of unobstructed work space.



HOTPACK CORPORATION

MANUFACTURING CONTROLLED ENVIRONMENTAL EQUIPMENT SINCE 1908
COTTMAN AVENUE AT MELROSE STREET • PHILADELPHIA 35, PENNSYLVANIA

DEVONSHIRE 3-1700 (215)

REPRESENTATIVES IN PRINCIPAL CITIES